Assignment 1-3 Palindromes

A palindrome is a number that reads the same backward as forward. For example, each of the following five-digit positive integers is a palindrome: 12321, 55555, 45554 and 11611. You are given a five-digit positive integer. In this problem you'll have to find out whether the given integer is a palindrome.

Input

The input consists of exactly one line with a five-digit positive integer n.

Output

You are to output a single line containing the word "palindrome" or "non-palindrome" depending on whether the integer n is a palindrome.

Sample Input 1

12345

Sample Output 1

non-palindrome

Sample Input 2

12321

Sample Output 2

palindrome